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PESTS NOT KNOWN TO OCCUR IN THE UNITED STATES OR OF  
LIMITED DISTRIBUTION, NO. 13: AUSTRALIAN CITRUS WHITEFLY

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Order: Family

Homoptera: Aleyrodidae

Pest

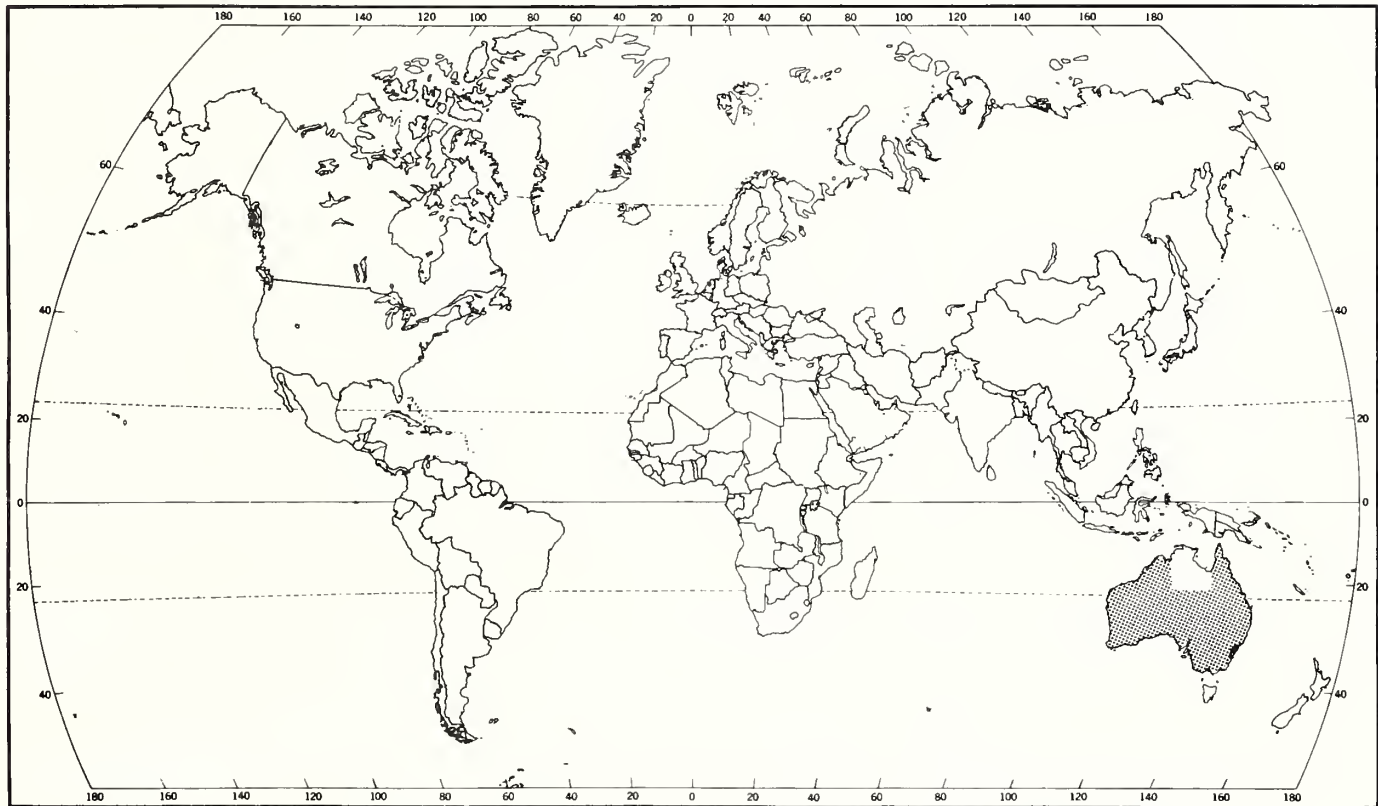
AUSTRALIAN CITRUS WHITEFLY  
Orchamoplatus citri (Takahashi)

Economic  
Importance

According to Jenkins and Shedley (1953), Orchamoplatus citri is a pest of lemons and other Citrus spp. in Western Australia. The sooty mold fungi which coat the fruits cause the most concern.

Hosts

O. citri is known only from Citrus spp. (Russell 1958).



Orchamoplatus citri map prepared by USDA, APHIS, PPQ,  
Biological Assessment Support Staff

General  
Distribution

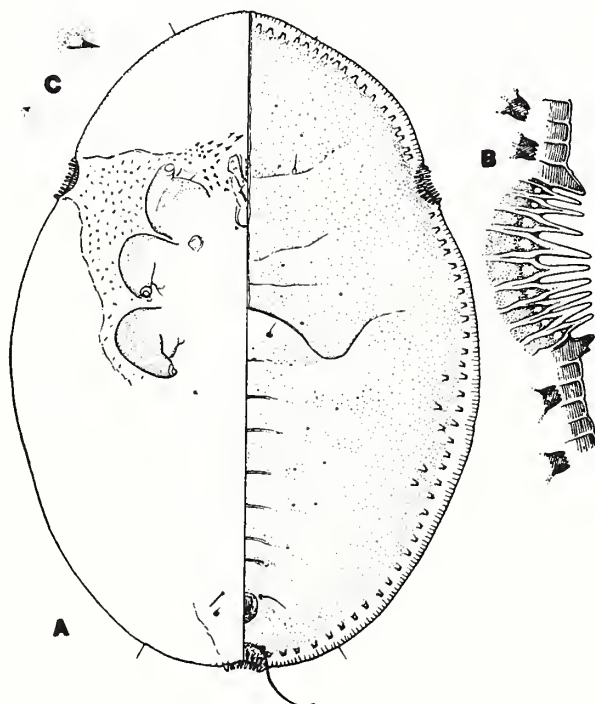
O. citri is known only from Australia: New South Wales, Victoria, Western Australia (Jenkins and Shedley 1953), South Australia, and Queensland (Mound and Halsey 1978).

## Characters

This species is similar to *O. mammaeferus* (PNKTO #12) except as follows:

PUPAE (figs. A-C) - Not yellowish, ovoid, and widest across abdominal segments 1 and 2. Additional row of 4-6 submarginal glands mesad of submarginal row on abdominal segments 1-4 on each side. Cephalic setae present on dorsum; caudal setae 160-200  $\mu$  long, and bases separated by 4-5 times length of submarginal gland. Numerous ventral minute spines, 2-25  $\mu$  long, on cephalothorax; few outside posterior legs extending cephalad along tracheal fold in broad band to margin, present between anterior leg and mouthparts (Russell 1958).

(Figs. A-C)



*O. citri*: A. Dorsal and ventral halves of body; B. Thoracic tracheal pore area and adjacent derm; C. Ventral spine

## Characteristic Damage

This whitefly infests the leaves in large numbers and lessens plant vigor by sucking sap. At times, the wax secretion of this pest virtually covers the lower surfaces of the leaves. Copious amounts of honeydew secreted by the immatures of this species coat the leaves,

stems, and fruits. Sooty mold fungi that develop on this secretion interfere with photosynthesis and reduce the attractiveness of ornamental plants. Fruits coated with sooty mold fungi are unmarketable or reduced in value.

#### Detection Notes

1. Examine plants blackened with sooty mold fungi, with droplets of honeydew secretion, or with tiny, white winged adults. In heavy infestations, a swarm of adults will rise from the plants when the plants are shaken.
2. Examine the undersides of the leaves for characteristic glassy, transparent wax secretions and pale larvae and pupae.
3. Collect infested leaves and submit for identification. Do not submit adults without associated pupae because only the pupae of whiteflies can be determined to species.

#### Biology

O. citri has several generations per year in Western Australia and all stages can be found on the plants simultaneously. The populations are usually greatest when succulent, young growth is present in spring and autumn and lowest in winter. Eggs are laid in a horseshoe shape or semicircle on the undersides of the leaves. The larvae and pupae develop on the undersurfaces of the leaves and are covered with glassy, transparent wax secretions. The adults often gather on young shoots and leaves (Jenkins and Shedley 1953).

#### Natural Enemies

According to Jenkins and Shedley (1953), slight control was achieved by several parasites, predators, and a beetle, Clambus sp.

#### Acknowledgment

The preparer thanks L. M. Russell, Systematic Entomology Laboratory, Beltsville, MD, for permission to use the illustrations.

## References

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